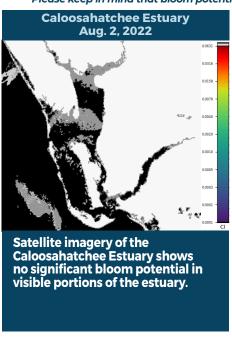


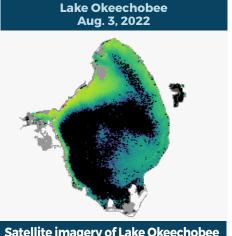
BLUE-GREEN ALGAL BLOOM WEEKLY UPDATE

REPORTING JULY 29 - AUG. 4, 2022

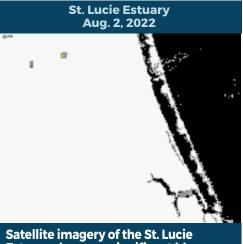
Satellite imagery provided by NOAA - Images are impacted by cloud cover.

A value of 0.004 is nominally equivalent to approximately 20-30 ug/L chlorophyll a of cyanobacteria, and 0.06 would be in the 300-500 ug/L chlorophyll a range. Please keep in mind that bloom potential is subject to change due to rapidly changing environmental conditions or satellite inconsistencies (i.e., wind, rain, temperature or stage).

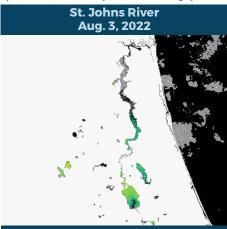




Satellite imagery of Lake Okeechobee shows approximately 50% coverage of moderate to high bloom potential, with the highest potential in the northwest quadrant of the lake.



Satellite imagery of the St. Lucie Estuary shows no significant bloom potential in visible portions of the



Satellite imagery of the St. Johns River shows areas of moderate to high bloom potential on Lake George and on the mainstem of the river downstream of Lake George to approximately Trout Creek and in **Doctors Lake.**

SUMMARY

There were 51 reported site visits in the past seven days with 51 samples collected. Algal bloom conditions were observed by samplers at 25 sites.

On 8/1, South Florida Water Management District (SFWMD) staff collected samples from the C43 Canal - S77 Structure (upstream) and the C43 Canal - S79 Structure (upstream). Neither sample had a dominant algal taxon nor cyanotoxins detected.

On 8/4, SFWMD collected a sample from L8 M Canal. Sample results are pending.

On 8/2 - 8/3, SFWMD staff performed bimonthly routine harmful algal bloom (HAB) monitoring on Lake Okeechobee at the following stations. Microcystin results are included in parentheses in parts per billion (ppb) following each station name: KISSRO.0 (non-detect); NES191 (non-detect); NES191 (non-detect); NES135 (non-detect); NE (non-detect); EASTSHORE (non-detect); L004 (non-detect); L008 (non-detect); L005 (non-detect); POLESOUT (non-detect); POLESOUT) (non-detect); L006 (non-detect); L008 POLESOUT3 (non-detect); KBARSE (non-detect); CLV10A (non-detect); PALMOUT (non-detect); PALMOUT3 (non-detect); PAL detect); LZ30 (non-detect); POLE3S (non-detect); RITTAE2 (non-detect); LZ25A (non-detect); L007 (non-detect); L006 (non-detect); and PELBAY3 (non-detect).

Ten of the Lake Okeechobee stations were dominated by Microcystis aeruginosa, 15 of the Lake Okeechobee stations had no dominant algal taxon, and only the POLESOUT station was co-dominated by Cylindrospermopsis raciborskii and Planktolyngbya limnetica. Algal bloom conditions were visible to the samplers only at stations L005 and LZ40.

On 8/1 - 8/4, Florida Department of Environmental Protection (DEP) staff collected samples from Swimming Pen Creek - Whitey's Fish Camp; Doctors Lake (four locations); St. Johns River - 2930 SR 13; 183rd Ave Canal - off Cross Creek; Orange Lake - McIntosh Bay; Orange Lake - HAB Center; Lake Marian; Pompano Canal - Seatan Waterway; Johns Lake; Lake Dell; Fish Lake; Lake Dot; Lake Griffin (Seminole County); Cooper Lake; and Hillsborough River - 1-75.

The Swimming Pen Creek - Whitey's Fish Camp and all four Doctors Lake samples were dominated by Microcystis aeruginosa or Microcystis sp. and had microcystins ranging between a trace level (0.43 ppb) and 5.4 ppb. The St. Johns River - 2930 SR 13 sample had no dominant algal taxon and a trace level (0.13 ppb) of cylindrospermopsin detected.

The 183rd Ave Canal - off Cross Creek, Orange Lake - McIntosh Bay, Orange Lake - HAB Center and Lake Marian samples were each dominated by Microcystis aeruginosa. The 183rd Ave Canal - off Cross Creek sample had a trace level (0.12 ppb) of microcystins detected. The Orange Lake - McIntosh Bay sample had a trace level (0.10 ppb) of microcystins detected, and the Orange Lake - HAB Center sample had 1.6 ppb of anatoxin-a and a trace level (0.31 ppb) of microcystins detected. The Lake Marian sample had 4.1 ppb of microcystins detected.

The Pompano Canal - Seatan Waterway and the Cooper Lake samples had no dominant algal taxon and had no cyanotoxins detected. Johns Lake and Lake Dell both had filamentous algal mats. The Johns Lake sample was co-dominated by the green alga Zygnema sp. and the cyanobacterium Scytonema sp. and had no cyanotoxins detected. The Lake Dell sample was dominated by the green alga Oedogonium sp. and had no cyanotoxins detected.

The results for Fish Lake, Lake Dot, Lake Griffin (Seminole County) and Hillsborough River - 1-75 are pending.

On 8/3, St. Johns River Water Management District (SJRWMD) staff collected a HAB response sample at Trout Creek - Trout Creek Park Boat Ramp. The sample was dominated by Dolichospermum circinale and had no cyanotoxins detected.

On 8/1, Highlands County staff collected samples from Little Red Water Lake and Lake Sebring. The Little Red Water Lake sample was dominated by Microcystis aeruginosa, and the Lake Sebring sample had no dominant algal taxon. Cyanotoxins were not detected in either sample.

On 8/3, Lee County staff collected a sample at Caloosahatchee River - Moody Canal. The sample was dominated by Anabaenopsis circularis and had no cyanotoxins detected.

On 7/28, DEP staff collected samples at Lake Kinsale, Lake Ivanhoe, Lake Sue and Lake Mann. No algal sample was collected at Lake Kinsale and 20 ppb of microcystins was

detected. The Lake Ivanhoe, Lake Sue and Lake Mann samples had no dominant algal taxon and had trace (0.18 ppb), trace (0.27 ppb) and 0.71 ppb of cylindrospermopsin detected,

On 7/28, SJRWMD staff collected routine HAB monitoring samples at Lake Monroe and Lake Washington. The Lake Monroe sample was dominated by Microcystis aeruginosa and had no cyanotoxins detected. The Lake Washington sample had no dominant algal taxon and no cyanotoxins were detected.

On 7/28, Lee County staff collected samples from Caloosahatchee River - Alva Boat Ramp and Caloosahatchee River - Davis Boat Ramp. The Caloosahatchee River - Alva Boat Ramp sample had no dominant algal taxon and no cyanotoxins detected. The Caloosahatchee River - Davis Boat Ramp sample was dominated by Glenodinium sp. and had no cyanotoxins

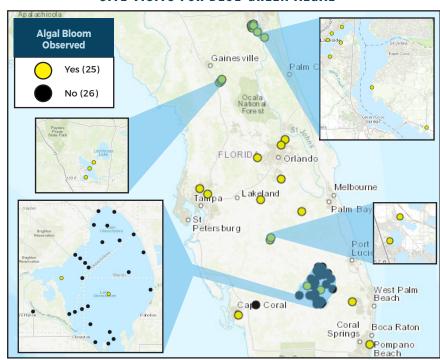
Results for completed analyses are available and posted at FloridaDEP.gov/AlgalBloom.

This is a high-level summary of the sampling events for the reported week. For all field visit and analytical result details, please refer to the complete algal bloom map with data table by clicking the "Field and Lab Details" Quick Link from the Algal Bloom Dashboard. Different types of blue-green algal bloom species can look different and have different impacts. However, regardless of species, many types of blue-green algae can produce toxins that can make you or your pets sick if swallowed or possibly cause skin and/or eye irritation due to contact. We advise staying out of water where algae is visibly present as specks or mats or where water is discolored pea-green, blue-green or brownish-red. Additionally, pets or livestock should not come into contact with algal bloom-impacted water or with algal bloom material or fish on the shoreline.

LAKE OKEECHOBEE OUTFLOWS

As of August 4 West (S-79) Pulse East (S-80) Constant Atlantic Ocean 0 cfs *Updates are generally made on Fridays. Total Inflows and Outflows (cfs) Weekly Inflow 2,725 627 Weekly Outflow 221 LAKE OKEECHOBE

SITE VISITS FOR BLUE-GREEN ALGAE



SIGN-UP FOR UPDATES

To receive personalized email notifications about blue-green algae and red tide, visit



ProtectingFloridaTogether.gov.

HUMAN ILLNESS

Florida Poison Control Centers can be reached 24/7 at 800-222-

(DOH provides grant funding to the Florida Poison Control Centers)

OTHER PUBLIC HEALTH CONCERNS

CONTACT DOH

(DOH county office) FloridaHealth.gov/ all-county-locations.html

SALTWATER BLOOM

- **Observe stranded wildlife** or a fish kill.
- Information about red tide and other saltwater algal blooms.

CONTACT FWC

800-636-0511 (fish kills) 888-404-3922 (wildlife Alert)

MyFWC.com/RedTide

REPORT ALGAL BLOOMS

Observe an algal bloom in a lake or freshwater river.

FRESHWATER BLOOM

Information about bluegreen algal blooms.



855-305-3903

(to report freshwater blooms)

FloridaDEP.gov/AlgalBloom